CLAIMS

1. (Currently Amended) A processor-readable medium comprising processor-executable instructions configured for:

receiving an instruction specifying additional per-frame DV metadata to extract from a DV data stream; ~~and~~

extracting the metadata from a DV frame of the DV data stream in response to the instruction; and

wherein the extracting comprises:

determining a DVPackID from an extraction list; and

identifying the metadata within the DV frame based on the DVPackID.

2. (Original) A processor-readable medium as recited in claim 1, comprising further processor-executable instructions configured for:

storing the metadata in a container; and

attaching the container to a video sample of the DV frame.

3. (Currently Amended) A processor-readable medium as recited in claim 1, wherein the receiving an instruction comprises:

receiving an AddPack call to add [[a]] the DVPackID to an extraction list;

receiving a RemovePack call to remove [[a]] the DVPackID from the extraction list; and

receiving a RemoveAllPacks call to remove all DVPackIDs from the extraction list.

4. (Original) A processor-readable medium as recited in claim 3, comprising further processor-executable instructions configured for:

returning a number indicating an amount of DVPackIDs present in the extraction list in response to a GetCount call; and

returning a DVPackID at an index in the extraction list in response to a GetPackID call that specifies the index.

5. (Canceled)

6. (Original) A processor-readable medium as recited in claim 2, comprising further processor-executable instructions configured for managing the container.

7. (Original) A processor-readable medium as recited in claim 6, wherein the managing the container comprises:

adding a DV_METADATA structure to the container in response to an Add call;

removing a DV_METADATA structure from the container in response to a Remove call;

removing all items from the container in response to a RemoveAll call;

returning a number indicating an amount of items present in the container in response to a GetCount call;

locking the container for exclusive access in response to a Lock call;

unlocking the container in response to an Unlock call;

retrieving an item from the container at a beginning index of the container in response to a GetFirst call; and

retrieving an item from the container at a next index of the container in response to a GetNext call.

8. (Original) A processor-readable medium as recited in claim 7, wherein the DV_METADATA structure comprises an unpacked version of a DV metadata pack.

9. (Original) A processor-readable medium as recited in claim 8, wherein the DV_METADATA structure comprises:

binary values unpacked from the DV metadata pack; and

a different variable name associated with each binary value.

10. (Original) A processor-readable medium as recited in claim 2, comprising further processor-executable instructions configured for:

demultiplexing the DV frame to generate the video sample and an audio sample.

11. (Original) A computer comprising the processor-readable medium as recited in claim 1.

12. (Original) A processor-readable medium comprising processor-executable instructions configured for:

managing a DV metadata extraction list; and

extracting a DV metadata pack from a DV frame based on a DVPackID within the extraction list.

13. (Original) A processor-readable medium as recited in claim 12, comprising further processor-executable instructions configured for storing the DV metadata pack into an IMFDVMetadataContainer.

14. (Original) A processor-readable medium as recited in claim 13, comprising further processor-executable instructions configured for attaching the IMFDVMetadataContainer to a DV sample of the DV frame.

15. (Original) A processor-readable medium as recited in claim 13, comprising further processor-executable instructions configured for unpacking the DV metadata pack into a DV pack-specific data structure.

16. (Original) A processor-readable medium as recited in claim 15, comprising further processor-executable instructions configured for storing the DV pack-specific data structure into the IMFDVMetadataContainer.

17. (Original) A processor-readable medium as recited in claim 15, wherein the DV pack-specific data structure comprises:

binary values unpacked from the DV metadata pack; and

a different variable name associated with each binary value.

18. (Original) A processor-readable medium as recited in claim 12, wherein the managing comprises:

adding a DVPackID to the extraction list in response to an AddPack call;

removing a DVPackID from the extraction list in response to a RemovePack call;

removing all DVPackIDs from the extraction list in response to a RemoveAllPacks call;

returning a number indicating an amount of DVPackIDs present in the extraction list in response to a GetCount call; and

returning a DVPackID at an index in the extraction list in response to a GetPackID call that specifies the index.

19. (Original) A processor-readable medium as recited in claim 12, wherein the extracting comprises:

identifying the DV metadata pack in the DV frame through a header in the DV metadata pack that contains the DVPackID; and

pulling the DV metadata pack out of the DV frame.

20. (Original) A processor-readable medium as recited in claim 13, comprising further processor-executable instructions configured for managing the IMFDVMetadataContainer.

21. (Original) A processor-readable medium as recited in claim 20, wherein the managing the IMFDVMetadataContainer comprises:

adding a DV_METADATA structure to the IMFDVMetadataContainer in response to an Add call;

removing a DV_METADATA structure from the IMFDVMetadataContainer in response to a Remove call;

removing all items from the IMFDVMetadataContainer in response to a RemoveAll call;

returning a number indicating an amount of items present in the IMFDVMetadataContainer in response to a GetCount call;

locking the IMFDVMetadataContainer for exclusive access in response to a Lock call;

unlocking the IMFDVMetadataContainer in response to an Unlock call;

retrieving an item from the IMFDVMetadataContainer at a beginning index of the IMFDVMetadataContainer in response to a GetFirst call; and

retrieving an item from the IMFDVMetadataContainer at a next index of the IMFDVMetadataContainer in response to a GetNext call.

22. (Original) A computer comprising the processor-readable medium as recited in claim 12.

23. (Original) A method comprising:

receiving an instruction to extract DV metadata from a DV data stream;

extracting the metadata from the DV data stream in response to the instruction;

storing the metadata in a container; and

attaching the container to a video sample of the DV data stream.

24. (Original) A method as recited in claim 23, further comprising managing access to the container according to method calls on a container API (application programming interface).

25. (Original) A method comprising:

managing DVPackIDs in a DV metadata extraction list based on method calls to a metadata extraction API (application programming interface); and

extracting a DV metadata pack from a DV frame based on a DVPackID within the extraction list.

26. (Original) A method as recited in claim 25, further comprising:

unpacking the DV metadata pack into a DV pack-specific data structure; and

storing the DV metadata pack and the DV pack-specific data structure in a container.

27. (Original) A method as recited in claim 26, further comprising attaching the container to a video sample of the DV frame.

28. (Original) A method as recited in claim 27, further comprising managing access to the container based on method calls to a container API.

29. (Currently Amended) A computer comprising a DV metadata extraction tool configured to extract metadata from a DV frame and enable access to the metadata and a multimedia architecture that includes the DV metadata extraction tool.

30. (Original) A computer as recited in claim 29, wherein the DV metadata extraction tool comprises:

an extraction interface configured to maintain an extraction list of DVPackIDs in response to method calls from an application and to store DV packs in a container based on the extraction list of DVPackIDs; and

a container interface configured to store a DV pack-specific data structures in the container and to manage access to DV packs and DV pack-specific data structures in response to method calls from the application.

31. (Canceled)

32. (Original) A computer comprising:

means for managing a DV metadata extraction list; and

means for extracting a DV metadata pack from a DV frame based on a DVPackID within the extraction list.

33. (Original) A computer as recited in claim 32, further comprising means for storing the DV metadata pack into an IMFDVMetadataContainer.

34. (Original) A computer as recited in claim 33, further comprising means for attaching the IMFDVMetadataContainer to a DV sample of the DV frame.

35. (Original) A computer as recited in claim 33, further comprising:

means for unpacking the DV metadata pack into a DV pack-specific data structure; and

means for storing the DV pack-specific data structure into the IMFDVMetadataContainer.

36. (Canceled)

37. (Canceled)

38. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte DV_METADATA_TEXT_HEADER pack, the data structure comprising:

a TotalTextData field having data unpacked from a second and third byte of the pack;

a TextType field having data unpacked from the third byte of the pack;

an OptionNumber field having data unpacked from the third byte of the pack;

a TextCode field having data unpacked from a fourth byte of the pack;

an AreaNumber field having data unpacked from a fifth byte of the pack; and

a TopicTag field having data unpacked from the fifth byte of the pack.

39. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte DV_METADATA_TAG pack, the data structure comprising:

an AbsoluteTrackNumber field having data unpacked from a second, third, and fourth byte of the pack;

a BlankFlag field having data unpacked from the second byte of the pack;

a TextFlag field having data unpacked from a fifth byte of the pack;

a TemporaryTrue field having data unpacked from the fifth byte of the pack;

a HoldFlag field having data unpacked from the fifth byte of the pack; and

a TagID field having data unpacked from the fifth byte of the pack.

40. (Canceled)

41. (Canceled)

42. (Canceled)

43. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte DV_METADATA_AAUX_SOURCE pack, the data structure comprising:

a LockedFlag field having data unpacked from a second byte of the pack;

an AudioFrameSize field having data unpacked from the second byte of the pack;

a StereoMode field having data unpacked from a third byte of the pack;

a Channel field having data unpacked from the third byte of the pack;

a PairBit field having data unpacked from the third byte of the pack;

an AudioMode field having data unpacked from the third byte of the pack;

a MultiLanguage field having data unpacked from a fourth byte of the pack;

a FiftySixty field having data unpacked from the fourth byte of the pack;

a SystemType field having data unpacked from the fourth byte of the pack;

an Emphasis field having data unpacked from a fifth byte of the pack;

a TimeConstant field having data unpacked from the fifth byte of the pack;

a SamplingFrequency field having data unpacked from the fifth byte of the pack; and

a Quantization field having data unpacked from the fifth byte of the pack.

44. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte DV_METADATA_AAUX_SOURCE_CONTROL pack, the data structure comprising:

a CopyGenerationManagementSystem field having data unpacked from a second byte of the pack;

an InputSource field having data unpacked from the second byte of the pack;

a Compression field having data unpacked from the second byte of the pack;

a SourceSituation field having data unpacked from the second byte of the pack;

a RecordingStart field having data unpacked from a third byte of the pack;

a RecordingEnd field having data unpacked from the third byte of the pack;

a RecordMode field having data unpacked from the third byte of the pack;

an InsertChannel field having data unpacked from the third byte of the pack;

a DirectionFlag field having data unpacked from a fourth byte of the pack;

a PlaybackSpeed field having data unpacked from the fourth byte of the pack; and

a GenreCategory field having data unpacked from a fifth byte of the pack.

45. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte pack, the data structure comprising:

a DaylightSavingsTime field having data unpacked from a second byte of the pack;

a ThirtyMinutesFlag field having data unpacked from the second byte of the pack;

a Tens of Time Zone field having data unpacked from the second byte of the pack;

a Units of Time Zone field having data unpacked from the second byte of the pack;

a Tens of Day field having data unpacked from a third byte of the pack;

a Units of Day field having data unpacked from the third byte of the pack;

a Week field having data unpacked from a fourth byte of the pack;

a Tens of Month field having data unpacked from the fourth byte of the pack;

a Units of Month field having data unpacked from the fourth byte of the pack;

a Tens of Year field having data unpacked from a fifth byte of the pack; and

a Units of Year field having data unpacked from the fifth byte of the pack.

46. (Canceled)

47. (Canceled)

48. (Canceled)

49. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte DV_METADATA_VAUX_SOURCE pack, the data structure comprising:

a Tens of TV Channel field having data unpacked from a second byte of the pack;

a Units of TV Channel field having data unpacked from the second byte of the pack;

a B/W field having data unpacked from a third byte of the pack;

an Enable Color field having data unpacked from the third byte of the pack;

a Color Frames Identification field having data unpacked from the third byte of the pack;

a Hundreds of TV Channel field having data unpacked from the third byte of the pack;

a Source Code field having data unpacked from a fourth byte of the pack;

a 50/60 field having data unpacked from the fourth byte of the pack;

a Signal Type field having data unpacked from the fourth byte of the pack; and

a Tuner Category field having data unpacked from a fifth byte of the pack.

50. (Canceled)

51. (Canceled)

52. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte DV_METADATA_CAMERA_CONSUMER_CAMERA_1 pack, the data structure comprising:

an Iris field having data unpacked from a second byte of the pack;

an AEMode field having data unpacked from a third byte of the pack;

an AGC field having data unpacked from the third byte of the pack;

a WBMode field having data unpacked from a fourth byte of the pack;

a WhiteBalance field having data unpacked from the fourth byte of the pack;

a FocusMode field having data unpacked from a fifth byte of the pack; and

a FocusPosition field having data unpacked from the fifth byte of the pack.

53. (Original) A processor-readable medium having stored thereon a data structure representing a 5-byte DV_METADATA_CAMERA_CONSUMER_CAMERA_2 pack, the data structure comprising:

a VerticalPanningDirection field having data unpacked from a second byte of the pack;

a VerticalPanningSpeed field having data unpacked from the second byte of the pack;

an ImageStabilizer field having data unpacked from a third byte of the pack;

a HorizontalPanningDirection field having data unpacked from the third byte of the pack;

a HorizontaPanningSpeed field having data unpacked from the third byte of the pack;

a FocalLength field having data unpacked from a fourth byte of the pack;

a ZoomEnable field having data unpacked from a fifth byte of the pack; and

an ElectricZoom field having data unpacked from the fifth byte of the pack.

54. (Canceled)